Serial Servers
Serial-to-Ethernet

Digi serial servers are configurable, easy-to-use network devices that convert serial data into network data, providing the flexibility needed to meet a wide range of demanding application requirements. They consist of all the vital components required to provide full network connectivity to any device with a serial port: an optimized and robust TCP/IP protocol stack, remote management capabilities, and a variety of serial and network interface options. In addition to providing TCP, UDP, SSH and SSL connectivity for network-aware applications, Digi's patented RealPort® technology delivers a fully transparent COM or TTY connection without any need for modifications to the existing software or hardware components in your application.

Digi serial server technology combines the inherent benefits of data networking with proven asynchronous connectivity. It transforms a previously isolated device with a serial port into a fully network-enabled component, and also migrates expensive dial-on-demand or "nailed up" phone line solutions to work over local or wide area networks. The benefits are clear: immediate access to information, improved flexibility and a significant reduction of operating costs.

With Digi serial servers, you can directly access, manage and control devices through the network. Wherever you are, you are connected – anytime. All without the time-consuming hassle and additional cost of separate wiring or the setup of campus modems, simply by taking advantage of your existing network infrastructure.

What do you need to do?

+ Add simple, cost-effective network connectivity to one or more serial devices ..... **Digi One SP, Digi Connect SP, PortServer TS**
+ Add cost-effective network connectivity to one or more RS-232/422/485 devices ..... **PortServer TS MEI**
+ Ethernet-enable a serial device in extended temperature or hazardous environments ... **PortServer TS H MEI, PortServer TS H^{cc} MEI, PortServer TS Haz MEI**
+ Integrate an RS-232/422/485 serial device to an 802.11b wireless network ..... **PortServer TS W MEI, Digi Connect Wi-SP**
+ Migrate industrial devices from basic serial-to-Ethernet functionality to advanced industrial protocol conversion, even in hazardous environments..... **Digi One IAP, Digi One IAP Haz**
+ Gain universal serial to IP network connectivity with versatile powering options including powered Ethernet and powered serial..... **PortServer TS P MEI**
+ Add both IP networking and phone line dial-up connectivity for remote access to serial and Ethernet devices..... **PortServer TS M MEI**
+ Add network connectivity to Model 170 traffic signal controller equipment..... **Digi Connect N2S-170**
+ Provide extended electrical isolation to connected serial devices for added safety ..... **Digi Connect ES**
+ Utilize an off-the-shelf development platform for easy embedded networking ..... **Digi Connect SP**

+ Serial Servers – Serial-to-Ethernet

1 to 4 Ports

Standard

- PortServer® TS 1/2/4 ..... pg. 19

Multi-Electrical Interface (RS-232/422/485)

- PortServer® TS 1/2/4 MEI ..... pg. 20
- PortServer® TS H MEI (Hardened/Extended Temperature) ..... pg. 21
- PortServer® TS H^{cc} MEI (Conformal Coated) ..... pg. 22
- PortServer® TS Haz MEI (Hazardous) ..... pg. 23
- PortServer® TS W MEI (Wireless) ..... pg. 24
- PortServer® TS M MEI (Modem) ..... pg. 25
- PortServer® TS P MEI (Power) ..... pg. 26
- Digi One® SP ..... pg. 27

Customizable

- Digi Connect SP® ..... pg. 28-29
- Digi Connect® Wi-SP ..... pg. 30
- Digi Connect® N2S-170 ..... pg. 31

Industrial

- Digi One® IAP ..... pg. 32
- Digi One® IAP Haz ..... pg. 33
- Digi One® IA ..... pg. 34
- Digi One® SP IA ..... pg. 35

8 or More Ports

- PortServer® TS 8/16 ..... pg. 36
- EtherLite® ..... pg. 37
- Digi Connect® ES (Extended Electrical Safety) ..... pg. 38

Management Tools/Special Features

- RealPort® ..... pg. 39
- RealPort® with Encryption ..... pg. 39
- Digi Port Authority – Remote ..... pg. 40
- Pass-Through Port ..... pg. 40
- Modem Emulation ..... pg. 41
- FIPS Certification ..... pg. 41

External Serial Servers Features Chart

	1 to 4 Ports Standard		Multi-Electrical Interface						
	PortServer TS 1/2/4		PortServer TS 1/2/4 MEI	PortServer TS H MEI	PortServer TS H^{c} MEI	PortServer TS Haz MEI	PortServer TS W MEI	PortServer TS M MEI
Serial Ports	1/2/4		1/2/4	1/2/4	1/2/4	1/2/4	1/2/4	1/3
Serial Connector	RJ-45		RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45
Serial Type	RS-232		RS-232/ 422/485	RS-232/ 422/485	RS-232/ 422/485	RS-232/ 422/485	RS-232/ 422/485	RS-232/ 422/485
10/100Base-T	•		•	•	•	•	•	•
Baud	230 Kbps		230 Kbps	230 Kbps	230 Kbps	230 Kbps	230 Kbps	230 Kbps
DHCP, RARP, Static IP, ARP-Ping	•		•	•	•	•	•	•
TCP/UDP	•		•	•	•	•	•	•
Modbus/TCP	•		•	•	•	•	•	•
Telnet/Reverse Telnet	•		•	•	•	•	•	•
HTTP	•		•	•	•	•	•	•
HTTPS	•		•	•	•	•	•	•
SSHv2 Server, SSL/TLS	•		•	•	•	•	•	•
SNMP	•		•	•	•	•	•	•
Port Buffering	•		•	•	•	•	•	•
Modem Emulation	•		•	•	•	•	•	•
DIN Rail	• (optional)		• (optional)	• (optional)	• (optional)	• (optional)	• (optional)	• (optional)
9-30VDC	•		•	•	•	•	•	•
COM/TTY Driver	RealPort with Encryption		RealPort with Encryption	RealPort with Encryption	RealPort with Encryption	RealPort with Encryption	RealPort with Encryption	RealPort with Encryption
Special Features				• Extended temp (-35° C to 74° C)	• Extended temp (-35° C to 74° C) • Conformal coated circuit board • NEMA TS 2	• Class 1, Div 2 • Extended temp (-35° C to 74° C) • Conformal coated circuit board	• 802.11b wireless	• Internal modem

PortServer TS P MEI	Digi One SP	Customizable	Digi Connect SP	Digi Connect Wi-SP	Digi Connect N2S-170	Industrial	Digi One IAP	Digi One IAP Haz
1/2/4	1		1	1/2	N/A		1	1
DB-9	DB-9		DB-9	DB-9	N/A		DB-9 and screw terminals	DB-9 and screw terminals
RS-232/ 422/485	RS-232/ 422/485		RS-232 or RS-232/ 422/485	RS-232/ 422/485	N/A		RS-232/ 422/485	RS-232/ 422/485
•	•		•	•	•		•	•
230 Kbps	230 Kbps		230 Kbps	230 Kbps	N/A		230 Kbps	230 Kbps
•	•		•	•	•		•	•
•	•		•	•	•		•	•
•							•	•
•	•		•	•	•		•	•
•	•		•	•	•		•	•
•			•	•	•			
•			•	•				
•			•	•	•			
•			•	•				
•			•	•	•		•	•
• (optional)							•	•
•	•		•	•			•	•
RealPort with Encryption	RealPort		RealPort	RealPort with Encryption	RealPort		RealPort	RealPort
• Powered serial • Powered Ethernet			• IPv6 ready • Custom-ization options	• 802.11b wireless; WPA2/ 802.11i wireless security	• Ethernet network controller • Designed for Model 170 traffic signal controller equipment		• Class 1, Div 2	• Class 1, Div 2 • Extended temp (-35° C to 74° C) • Conformal coated circuit board

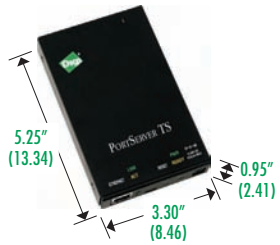
External Serial Servers Features Chart

	Industrial	Digi One IA	Digi One SP IA	8 or More Ports	PortServer TS 8/16 Family	EtherLite	Digi Connect ES
Serial Ports		1	1		8/16	2/8/16/32	4/8/16
Serial Connector		DB-9 and screw terminals	DB-9		RJ-45	RJ-45	RJ-45
Serial Type		RS-232/422/485	RS-232/422/485		RS-232 or RS-232/422/485	RS-232/422/485 or RS-422/485	RS-232
10/100Base-T		•	•		•	•	•
Baud		230 Kbps	230 Kbps		230 Kbps	115 Kbps	230 Kbps
DHCP, RARP, Static IP, ARP-Ping		•	•		•	• (static IP or bootp only)	•
TCP/UDP		•	•		•		•
Modbus/TCP		•	•				
Telnet/Reverse Telnet		•	•		•		•
HTTP		•	•		•		•
HTTPS		•			•		•
SSHv2 Server, SSL/TLS		•			•		•
SNMP		•			•		•
Port Buffering							
Modem Emulation		•	•		•		•
DIN Rail		•	• (via kit)				
9-30VDC		•	•				
COM/TTY Driver		RealPort with Encryption	RealPort		RealPort with Encryption	RealPort with Encryption	RealPort with Encryption
Special Features		• Pass-through port • Industrial protocol bridging • Class 1, Div 2	• DIN rail and wall mount kit		• 48VDC models		• Galvanic port isolation • Ethernet switch on 8/16-port models

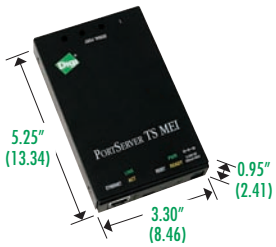
Serial-to-Ethernet

Multi-Electrical Interface

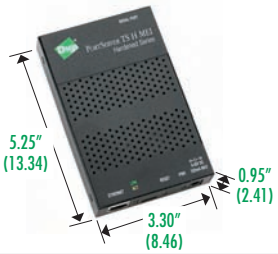
PortServer TS 1/2/4



PortServer TS 1/2/4 MEI

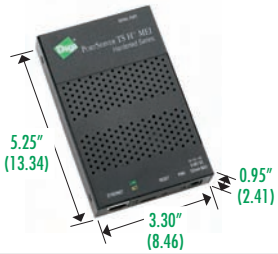


PortServer TS 1/2/4 H MEI

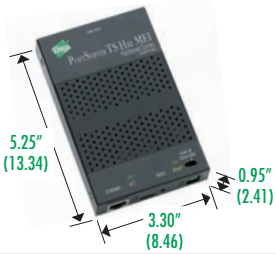


Multi-Electrical Interface

PortServer TS 1/2/4 H^{cc} MEI



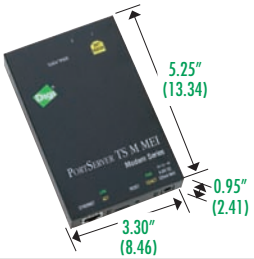
PortServer TS Haz MEI



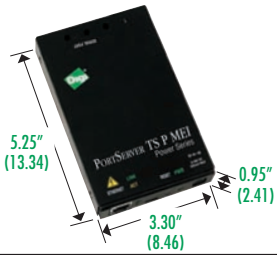
PortServer TS 1/2/4 W MEI

Multi-Electrical Interface

PortServer TS 1/3 M MEI



PortServer TS 1/2/4 P MEI

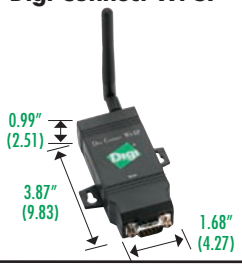


Digi One SP

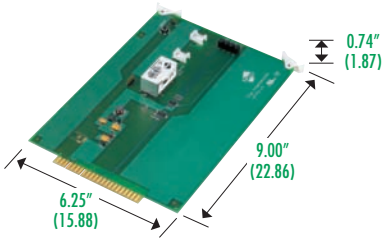
Customizable

Digi Connect SP

Digi Connect Wi-SP



Digi Connect N2S-170

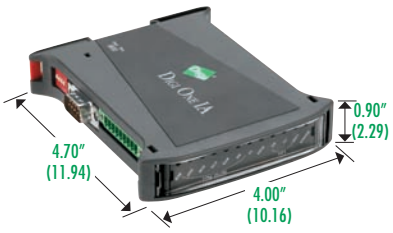


Measurements: inch
(cm)

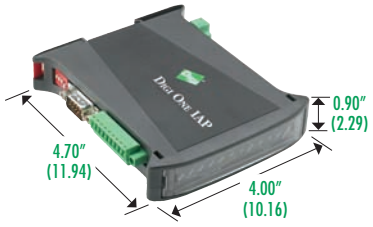
Serial-to-Ethernet

Industrial

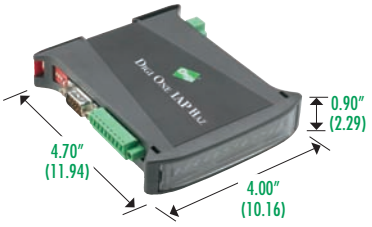
Digi One IA



Digi One IAP

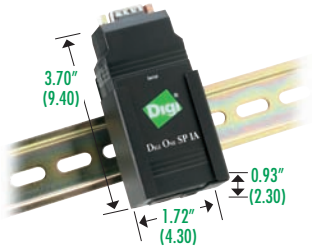


Digi One IAP Haz



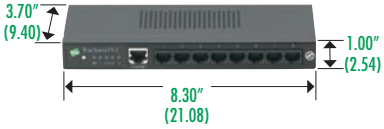
Industrial

Digi One SP IA

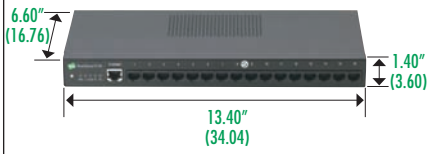


8 or More Ports

PortServer TS 8

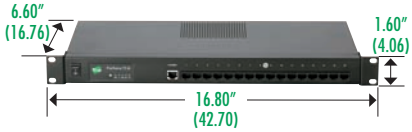


PortServer TS 16

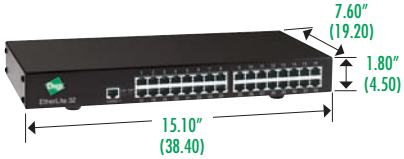


8 or More Ports

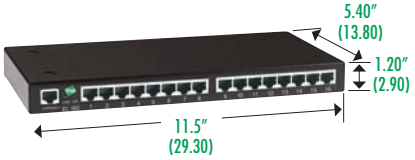
PortServer TS 16 Rack, PortServer TS 16 8/16 MEI



EtherLite 32

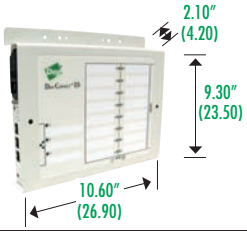


EtherLite 160



EtherLite 2

Digi Connect ES



Measurements: inch
(cm)

Digi's patented RealPort COM/TTY redirector is a standard feature of our serial servers. Its comprehensive OS support includes:

- Microsoft Windows Server 2003
- Microsoft Windows Vista
- Microsoft Windows XP
- Microsoft Windows 2000
- Microsoft Windows 98
- Microsoft Windows Me
- Microsoft Windows NT
- SCO Open Server and UnixWare
- Linux
- AIX
- True 64
- Sun Solaris SPARC and Intel
- HP-UX
- NCR UNIX MP-RAS

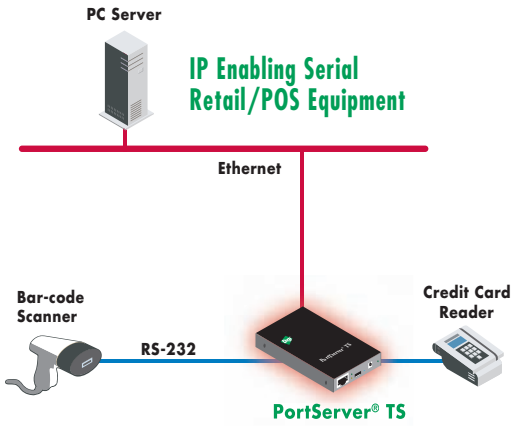
See page 39 for more information about RealPort.

PortServer® TS 1/2/4 :: Standard Serial Servers

Overview :: The PortServer TS 1/2/4 family delivers simple and reliable serial-to-Ethernet connectivity in a common serial pinout (also shared with the PortServer TS 8/16). It addresses the growing need to connect individual serial devices to the network over industry standard Ethernet. Power monitoring and security features make these devices ideal for large deployments and especially replicated or remote installments.

+ Features ::

- Easy configuration using installation CD
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- TCP/UDP Socket Services for broad device connectivity and application use
- Auto-connect the serial device to networked server using raw, Telnet, Rlogin
- SNMP for easy network management
- Reverse SSH for direct SSH socket connectivity to serial ports
- NIST FIPS-197 certified (secure AES)
- PPP for dial-up network access to serial devices and remote networks
- Easy configuration through web interface (HTTP/HTTPS)
- Modem emulation allows support for devices designed only for modem communications
- Tunable for low latency or optimized throughput
- 5-year warranty

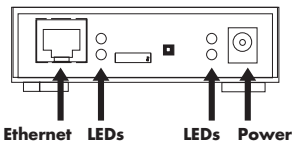


See page 36 for 8- and 16-port versions.

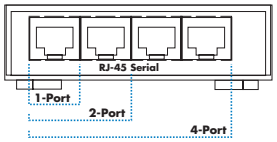
+ Specifications ::

- 10/100Base-T Ethernet support
- 1, 2 or 4 serial ports (RJ-45)
- RS-232
- Baud rates up to 230 Kbps
- Full modem and hardware flow control
- Modem emulation
- TCP/UDP Socket Services
- Telnet and Reverse Telnet
- DHCP/RARP/ARP-Ping for IP address assignment
- PPP
- SNMP
- SSH server for secure management of the PortServer TS
- SSH server socket support for secure direct connections to serial ports
- SSL/TLS
- HTTP configuration
- Patented RealPort technology for COM and TTY ports
- 9-30VDC power supply included
- RFC 2217 support
- LED status for link and power
- DIN rail and mounting options

PortServer TS Family - Front



PortServer TS Family - Back



Part Numbers ::

Model	North America	International
PortServer TS 1 – 1 port	70002041	70002042
PortServer TS 2 – 2 ports	70002043	70002044
PortServer TS 4 – 4 ports	70002045	70002046

All cables and accessories: pg. 158-159.

PortServer® TS 1/2/4 MEI :: Multi-Electrical Interface Serial Servers

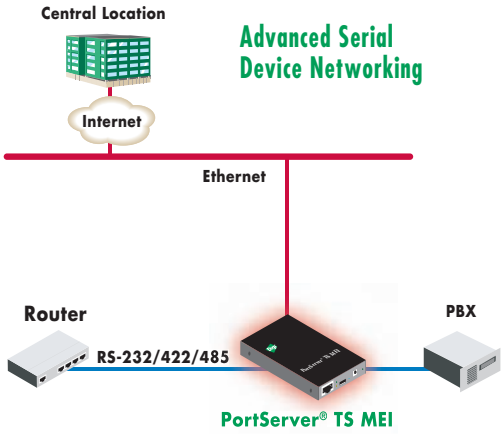
Overview :: PortServer TS MEI (Multi-Electrical Interface), offers the same features of the PortServer TS, but adds the capability to support RS-232/422/485 serial devices. Available in one-, two- and four-port models, it is ideal for installations involving specialized devices that require these different cabling options.

Features ::

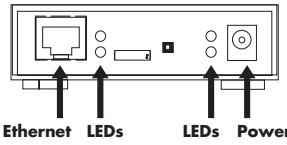
- Switch selectable RS-232/422/485 for simple interfacing to virtually any type of serial device
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- Management and diagnostic utility for simple and efficient device monitoring and troubleshooting
- Modem emulation allows the serial server to function as a modem
- NIST FIPS-197-certified (secure AES)
- Secure communication via SSHv2 and SSL/TLS
- Port buffering for data capture
- Easy configuration through web browser interface (HTTP/HTTPS)
- SNMP for easy network management
- PPP for dial-up network access to serial devices and remote networks
- Tunable for low latency or optimized throughput
- 5-year warranty

Specifications ::

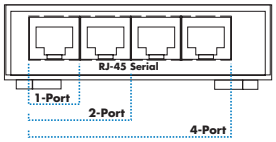
- 10/100Base-T Ethernet support
- 1, 2 or 4 serial ports (RJ-45)
- Switch selectable RS-232/422/485
- Baud rates up to 230 Kbps
- TCP/UDP/Telnet Socket Services
- Patented RealPort with encryption and authentication
- 9-30VDC input
- Modem emulation
- SNMP (read/write)
- PPP
- SSHv2, SSL/TLS
- Port buffering
- Modbus to Modbus/TCP conversion
- HTTP/HTTPS
- DHCP/RARP/ARP-Ping for IP address assignment
- RFC 2217 support
- DIN rail and mounting options



PortServer TS MEI Family - Front



PortServer TS MEI Family - Back



Part Numbers ::

Model	North America	International
PortServer TS 1 MEI – 1 port	70001805	70001832
PortServer TS 2 MEI – 2 ports	70001806	70001833
PortServer TS 4 MEI – 4 ports	70001807	70001834

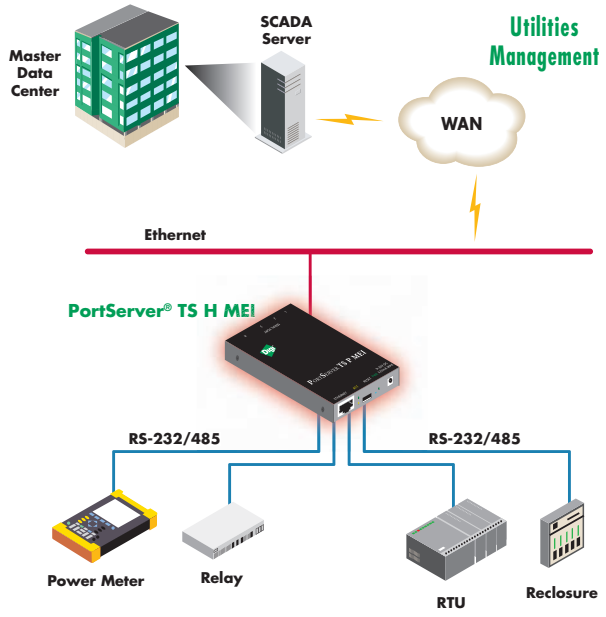
All cables and accessories: pg. 158-159.

PortServer® TS H MEI :: Multi-Electrical Interface Serial Servers (Hardened)

Overview :: PortServer TS H MEI is designed specifically for traffic management, pipelines or any remote application requiring a hardened serial-to-Ethernet solution that can withstand extreme temperatures (-35° C to 74° C). Available in one-, two-, and four-port versions, PortServer TS H MEI makes it easy to network-enable and remotely manage fuel tank monitors, flow meters, telemetry equipment, heating and cooling systems, or any RS-232/422/485 serial device.

+ Features ::

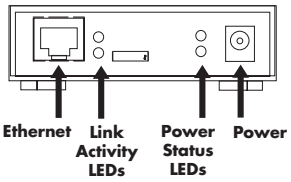
- Robust, hardened model with extended temperature range of -35° C to 74° C (-31° F to 165° F)
- RS-232/422/485 switch selectable on Port 1, RS-232 on all other ports
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- Monitoring and diagnostic utility for simple and efficient device monitoring and troubleshooting
- NIST FIPS-197 certified (secure AES)
- Secure communication via SSHv2 and SSL/TLS
- Port buffering for data capture
- Easy configuration through web browser interface (HTTP)
- Tunable for low latency or optimized throughput
- 9-30VDC power with bare-wire "pigtail" for direct connection
- 5-year warranty



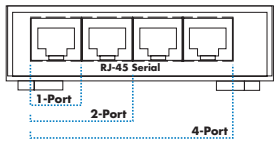
+ Specifications ::

- 10/100Base-T Ethernet support
- 1, 2 or 4 serial ports (RJ-45)
- Switch selectable RS-232/422/485
- Baud rates up to 230 Kbps
- TCP/UDP/Telnet Socket Services
- Patented RealPort with encryption and authentication
- 9-30VDC input
- Locking barrel power connector; hardened power supply sold separately
- Modem emulation
- SNMP (read/write)
- PPP
- SSHv2
- Port buffering
- Modbus to Modbus/TCP conversion
- HTTP
- Digi Port Authority – Remote management diagnostics and auto-discovery tool
- DHCP/RARP/ARP-Ping for IP address assignment
- RFC 2217 support
- DIN rail and mounting options

PortServer TS H MEI - Front



PortServer TS H MEI - Back



Part Numbers ::

Model	North America	International
PortServer TS 1 H MEI - 1 port	70001917	70001917
PortServer TS 2 H MEI - 2 ports	70001918	70001918
PortServer TS 4 H MEI - 4 ports	70001919	70001919
12VDC Extended Temperature Power Supply w/ Locking Barrel Connector	76000752	76000752

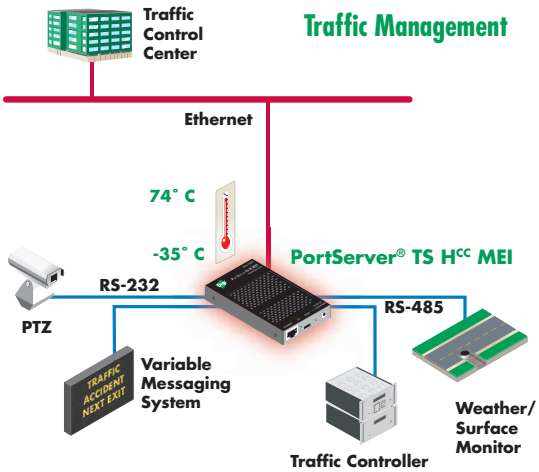
All cables and accessories: pg. 158-159.

PortServer® TS Hcc MEI :: Multi-Electrical Interface Serial Servers (Conformal Coated)

Overview :: The PortServer TS Hcc MEI family of serial servers delivers high-performance serial-to-Ethernet connectivity. It is designed with a conformal coated circuit board for environments that require extended temperatures, such as traffic management installations, utility plants and pipelines. Available in one-, two-, and four-port versions, PortServer TS Hcc MEI makes it easy to network-enable and remotely manage variable message signs, loop detectors, ramp meters or any RS-232/422/485 serial device.

Features ::

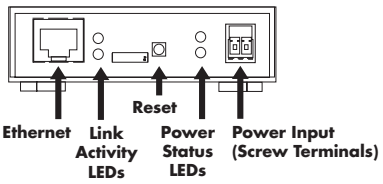
- Robust, hardened model with extended temperature range of -35° C to 74° C (-31° F to 165° F)
- NEMA TS 2 certified
- Conformal coated circuit board
- Ships in "Latency Mode and TCP Keepalive" setting
- RS-232/422/485 switch selectable on all ports
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- Monitoring and diagnostic utility for simple and efficient device monitoring and troubleshooting
- NIST FIPS-197 certified (secure AES)
- Data security via SSHv2 and SSL/TLS
- Port buffering for data capture
- Easy configuration through web interface (HTTP)
- Tunable for low latency or optimized throughput
- 9-30VDC power with screw terminal connector
- 5-year warranty



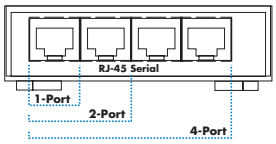
Specifications ::

- Conformal coated circuit board
- 10/100Base-T Ethernet support
- 1, 2 or 4 serial ports (RJ-45)
- Switch selectable RS-232/422/485
- Baud rates up to 230 Kbps
- TCP/UDP/Telnet Socket Services
- Patented RealPort with encryption and authentication
- 9-30VDC input
- Screw terminal power connector; no power supply included
- Modem emulation
- SNMP (read/write)
- PPP
- SSHv2
- Port buffering
- Modbus to Modbus/TCP conversion
- HTTP
- Digi Port Authority – Remote management diagnostics and auto-discovery tool
- DHCP/RARP/ARP-Ping for IP address assignment
- RFC 2217 support
- DIN rail and mounting options

PortServer TS Hcc MEI - Front



PortServer TS Hcc MEI - Back



Part Numbers ::

Model	North America	International
PortServer TS 1 Hcc MEI - 1 port	70002038	70002038
PortServer TS 2 Hcc MEI - 2 ports	70002039	70002039
PortServer TS 4 Hcc MEI - 4 ports	70002040	70002040
12VDC, 100-240VAC Extended Temperature Power Supply (no plug)	76000736	76000736

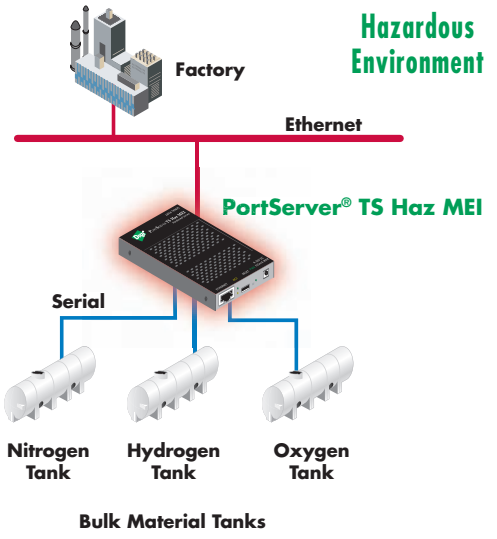
All cables and accessories: pg. 158-159.

PortServer® TS Haz MEI :: Multi-Electrical Interface Serial Servers (Hazardous)

Overview :: The PortServer TS Haz MEI makes it easy to connect one to four serial devices to your network, even in applications where environmental hazards demand extended safety features and operating tolerances. With a conformal coated circuit board, extended temperature tolerance and the ability to safely perform in flammable environments (Class 1, Division 2 certified), it is the ideal device connectivity solution for applications in factory automation and utility management (gas, electric and water).

+ Features ::

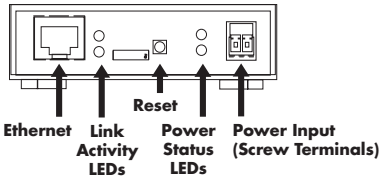
- Robust, hardened model with extended temperature range of -35° C to 74° C (-31° F to 165° F)
- Class 1, Division 2 rated
- Conformal coated circuit board
- Ships in "Latency Mode and TCP Keepalive" setting
- RS-232/422/485 switch selectable on all ports
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- Monitoring and diagnostic utility for simple and efficient device monitoring and troubleshooting
- Data security via SSHv2 and SSL/TLS
- Port buffering for data capture
- Easy configuration through web interface (HTTP)
- Tunable for low latency or optimized throughput
- 9-30VDC power with screw terminal connector
- 5-year warranty



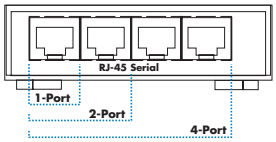
+ Specifications ::

- Conformal coated circuit board
- 10/100Base-T Ethernet support
- 1, 2 or 4 serial ports (RJ-45)
- Switch selectable RS-232/422/485
- Baud rates up to 230 Kbps
- TCP/UDP/Telnet Socket Services
- Patented RealPort with encryption and authentication
- 9-30VDC input
- Screw terminal power connector; no power supply included
- Modem emulation
- SNMP (read/write)
- PPP
- SSHv2
- Port buffering
- Modbus to Modbus/TCP conversion
- HTTP
- Digi Port Authority – Remote management diagnostics and auto-discovery tool
- DHCP/RARP/ARP-Ping for IP address assignment
- RFC 2217 support
- DIN rail and mounting options

PortServer TS Haz MEI - Front



PortServer TS Haz MEI - Back



Part Numbers ::

Model	North America	International
PortServer TS 1 Haz MEI - 1 port	70002318	70002318
PortServer TS 2 Haz MEI - 2 ports	70002319	70002319
PortServer TS 4 Haz MEI - 4 ports	70002320	70002320
12VDC, 100-240VAC Extended Temperature Power Supply (no plug)	76000736	76000736

All cables and accessories: pg. 158-159.

PortServer® TS W MEI :: Multi-Electrical Interface Serial Servers (Wireless)

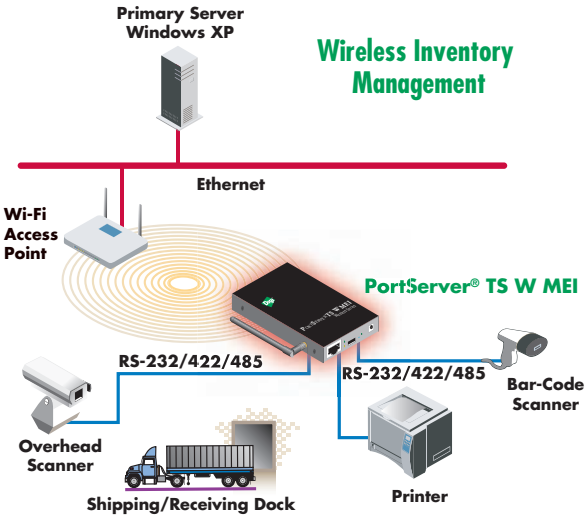
Overview :: PortServer TS W MEI is designed to easily integrate any RS-232/422/485 serial device to an 802.11b wireless Ethernet network. It is ideal for use in environments where wired LANs are not feasible or where serial devices are periodically moved.

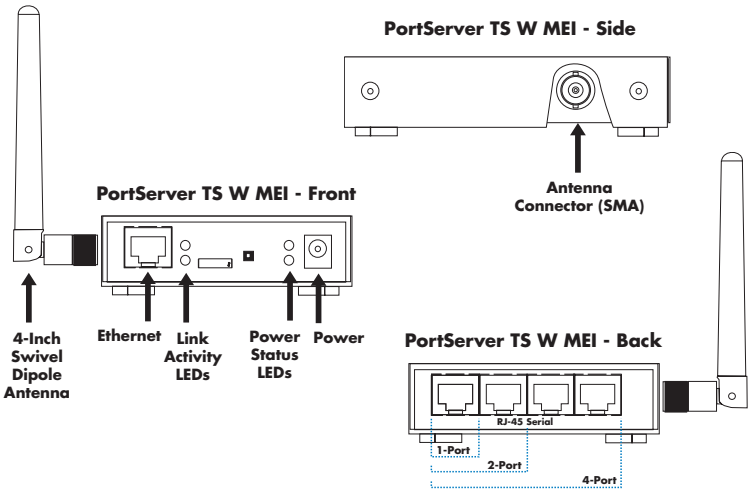
Features ::

- Easily connect serial devices to an 802.11b wireless Ethernet network interface
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- External antenna connector (SMA) can also be used with third party antenna for extended range/performance
- Includes four-inch 50 ohm swivel dipole antenna
- Switch selectable RS-232/422/485 for simple interfacing to any type of serial device
- Monitoring and diagnostics utility for simple and efficient device monitoring and troubleshooting
- NIST FIPS-197 certified (secure AES)
- Data security via SSHv2, and SSL/TLS
- Wired Equivalent Privacy (WEP)
- Easy configuration through web browser interface (HTTP)
- Tunable for low latency or optimized throughput
- 5-year warranty

Specifications ::

- 10/100Base-T Ethernet support
- 1, 2 or 4 serial ports (RJ-45)
- Switch selectable RS-232/422/485
- Baud rates up to 115.2 Kbps
- 802.11b wireless radio
- WEP supporting 64-bit and 128-bit encryption
- TCP/UDP/Telnet Socket Services
- Patented RealPort with encryption and authentication
- RFC 2217 support
- 9-30VDC input
- Modem emulation
- SNMP (read/write)
- PPP
- SSHv2
- Port buffering
- Tunable latency
- Modbus to Modbus/TCP conversion
- DIN rail and mounting options





Part Numbers ::

Model	North America	International
PortServer TS 1 W MEI – 1 port	70001954	70001955
PortServer TS 2 W MEI – 2 ports	70001956	70001957
PortServer TS 4 W MEI – 4 ports	70001958	70001959

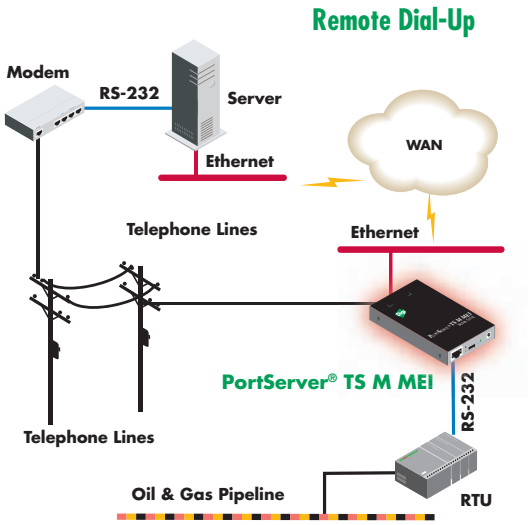
All cables and accessories: pg. 158-159.

PortServer® TS M MEI :: Multi-Electrical Interface Serial Servers (Modem)

Overview :: PortServer TS M MEI offers Ethernet and RS-232/422/485 serial connections, with the added flexibility of an internal modem. The one- and three-port serial servers are ideal for applications requiring both IP networking and standard phone line dial-up connectivity for remote access to serial devices.

Features ::

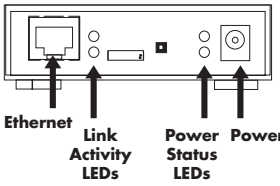
- Easily connect to remote networks and devices
- Internal V.92 modem
- Switch selectable RS-232/422/485 for simple interfacing to any type of serial device
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- NIST FIPS-197 certified (secure AES)
- PPP and SSH for creating secure IP network over serial connection
- Easy IP assignment via DHCP, RARP, ARP-Ping or Digi-provided tools (included)
- Tunable for low latency or optimized throughput
- 5-year warranty



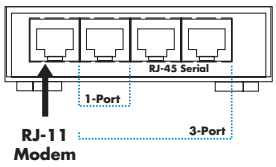
Specifications ::

- 10/100Base-T Ethernet support
- 1 or 3 serial ports (RJ-45)
- Switch selectable RS-232/422/485
- RJ-45 modem serial port connection
- Baud rates up to 230 Kbps (serial ports)
- Internal v.90/v.92 modem
- Full modem and hardware flow control
- DHCP/RARP/ARP-Ping for IP address assignment
- Low latency
- TCP/UDP Socket Services
- Telnet and Reverse Telnet
- Patented RealPort technology with encryption and authentication
- RFC 2217 support
- PPP
- SSHv2
- Port buffering
- Modbus/TCP protocol conversion
- HTTP/HTTPS
- SNMPv1 (read/write)
- DIN rail and mounting options

PortServer TS M MEI - Front



PortServer TS M MEI - Back



Part Numbers ::

Model	North America	International
PortServer TS 1 M MEI – 1 port	70001898	70001985
PortServer TS 3 M MEI – 3 ports	70001899	70001986

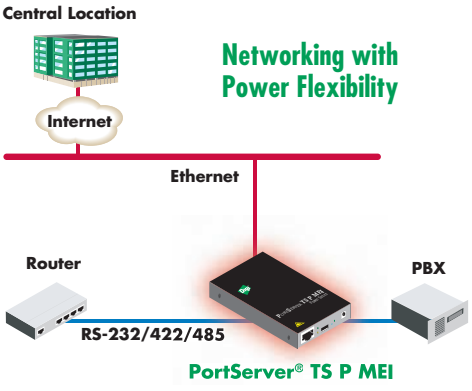
All cables and accessories: pg. 158-159.

PortServer® TS P MEI :: Multi-Electrical Interface Serial Servers (Power)

Overview :: The PortServer TS P MEI Power Series is designed for universal, high-performance serial-to-Ethernet connectivity with versatile powering options. It is ideal for RS-232/422/485 applications where traditional power alternatives such as powered Ethernet (802.3af) and powered serial are required. PortServer TS P MEI can be powered by an external device via the serial port (power in) or can power an external device via the serial port (power out) for added flexibility.

Features ::

- Supports powered Ethernet (802.3af) or powered serial for versatile and redundant powering options
- Easily network-enable multiple serial devices
- RS-232/422/485 for simple interfacing to virtually any type of serial device
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- Management and diagnostic utility for simple and efficient device monitoring and troubleshooting
- Modem emulation for easy integration and replacement of modems
- Secure communication via SSHv2
- Port buffering for data capture
- Easy configuration through web browser interface
- SNMP for easy network management
- Tunable for low latency or optimized throughput
- 5-year warranty



Specifications ::

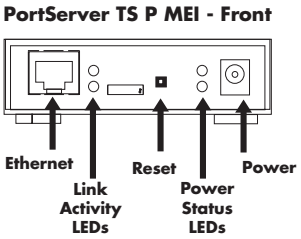
- 10/100Base-T Ethernet support
- 1, 2 or 4 serial ports
- Switch selectable RS-232/422/485
- Baud rates up to 230 Kbps
- Full modem and hardware flow control
- TCP/UDP Socket Services
- Telnet, SSHv2
- 802.3af powered Ethernet (end- and mid-span support)
- SNMP (read/write)
- PPP
- Tunable latency
- Modbus to Modbus/TCP conversion
- HTTP
- DHCP/RARP/ARP-Ping for IP address assignment
- RFC 2217 support

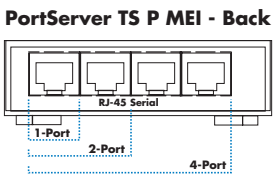
Serial Power Input

- DC input connector, 9-30VDC, 525 mA max
- Serial Port 1, Pin 1 (RI), 9-30VDC, 525 mA max

Serial Power Output

- Available on all serial ports
- 1 watt available power with selectable voltage level
- Pin 1 (RI) 5VDC up to 200 mA max
- Pin 9 (DTR) 9VDC up to 100 mA max





Part Numbers ::

Model	North America (end-/mid-span PoE)	North America (mid-span PoE)	International (end-/mid-span PoE)
PortServer TS 1 P MEI – 1 port	70002314	70001988	70001991
PortServer TS 2 P MEI – 2 ports	70002315	70001989	70001992
PortServer TS 4 P MEI – 4 ports	70002316	70001990	70001993

All cables and accessories: pg. 158-159.

Digi One® SP :: Multi-Electrical Interface Serial Servers

Overview :: The Digi One SP enables easy Ethernet connectivity for any device with a serial port. Its compact design delivers cost-effective performance and capability in one of the smallest form factors available. It is ideal for applications requiring simple and easy-to-use data communications.

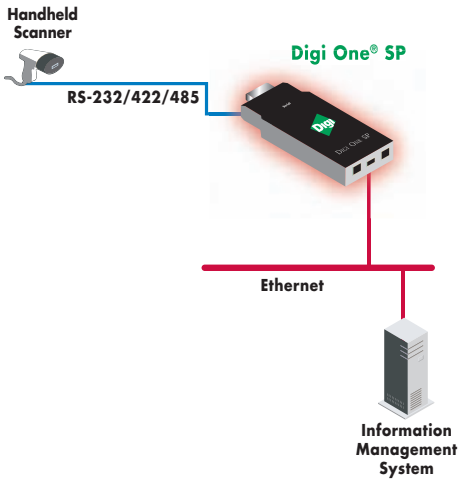
+ Features ::

- Easy configuration using installation CD
- Compact form factor – only 3.70 in (9.04 cm) in length
- Digi's patented RealPort® redirector for COM or TTY port control and management
- TCP/UDP Socket Services for broad device connectivity and application use
- Auto-connect the serial device to a networked server using raw, Telnet, Rlogin
- Reverse Telnet for easy access of serial devices from network
- Easy configuration through web interface (HTTP)
- Switch selectable RS-232/422/485 serial interface supports any type of serial device
- Modem emulation allows support for devices designed only for modem communications
- 5-year warranty

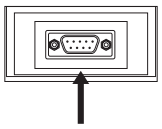
+ Specifications ::

- 10/100Base-T Ethernet support
- 1 serial port (DB-9M)
- Switch selectable RS-232/422/485
- Baud rates up to 230 Kbps
- Full modem and hardware flow control
- Modem emulation
- TCP/UDP Socket Services
- Telnet and Reverse Telnet
- DHCP/RARP/ARP-Ping for IP address assignment
- HTTP configuration
- Patented RealPort technology
- LED status for link and power

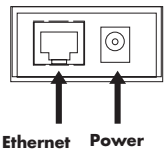
Retail/POS



Digi One SP - Front



Digi One SP - Back



Part Numbers ::

Model	North America	International
Digi One SP - 1 port	70001851	70001852

All cables and accessories: pg. 158-159.

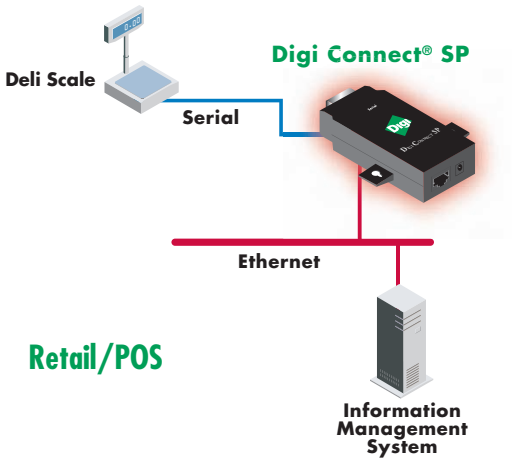
Digi Connect SP® :: Standard and Customizable Serial Servers

Overview :: The Digi Connect SP serial server delivers a powerful, compact and cost-effective off-the-shelf hardware platform for standard plug-and-play or embedded networking solutions.

+ Features ::

General

- Compact off-the-shelf hardware platform for standard or custom network applications
- RS-232 only or switch-selectable RS-232/422/485 interface - Throughput up to 230,400 bps
- Integrated 10/100 Mbit network interface
- Flexible power input of 9-30VDC
- Digi's patented RealPort® redirector for COM or TTY port control and management
- IPv6 support for compatibility with next generation networks
- Automated security alerts via email and SNMP traps
- Standard firmware models for plug-and-play applications
- Complete serial-to-network connectivity and unique product customization flexibility
- Development Kit for custom applications
  - Based on Digi's royalty-free NET+OS® development platform
  - Integrated building blocks and tools significantly reduce traditional design risk, accelerate overall software development process
  - Includes Digi Connect SP w/JTAG, Macraigor Raven JTG debugger and NET+OS software components
- 5-year warranty



+ Specifications ::

Custom Firmware Versions (Development Kit)

- Digi Connect SP w/JTAG
- Macraigor Raven JTAG debugger
- NET+OS software components
  - Microcross™ GNU X-Tools with command line and visual GDB debugger
  - ThreadX® Real-Time Operating System with picokernel™ architecture
  - Fusion™ TCP/IP stack with full networking protocol and extended networking services support
  - TCP, UDP, ICMP, IGMP, DNS, SNMPv2, LDAP, POP, SMTP, PPP, FTP, SNTP, Telnet, FastIP, Fast Sockets, Multi-Homing
  - Universal IP address assignment through Address Configuration Executive (ACE)
  - Static IP, DHCP, BOOTP, Auto-IP, RARP, ARP/Ping
  - Allegro Software embedded web server with HTTPS support
  - SSL 3.0/TLS 1.0 with strong encryption
  - DES (56-bit)
  - 3DES (168-bit)
  - AES (128/256-bit)
  - Flexible and robust file system supporting RAM and Flash (with wear leveling)
- SMICng MIB compiler
- Micro XML SAX parser
- Additional utilities
  - HTML-to-C compiler
  - Flash download
- Sample code
- Documentation
- Cables
- Loop-back adapter
- Power supplies

Standard Firmware Versions

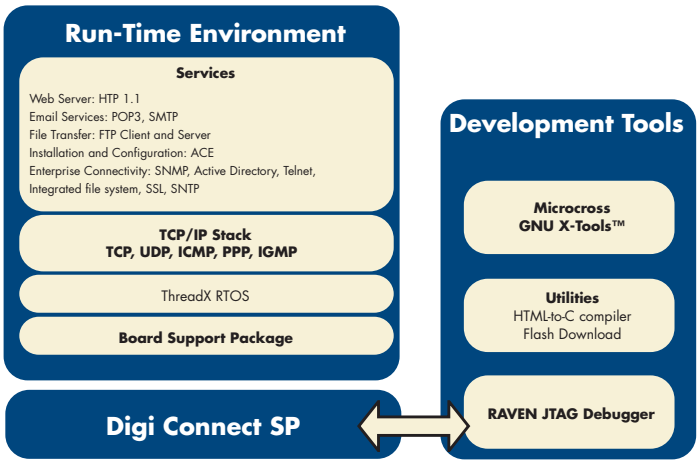
- Robust on-board TCP/IP stack with built-in web server
- Universal IP address assignment
  - Static IP, DHCP, Auto-IP
- Dynamic DNS support (DHCP Option 12)
- Pre-defined and custom device profiles
- Customizable web interface with optional Java applet support
- Telnet command line interface
- Modem emulation and port logging

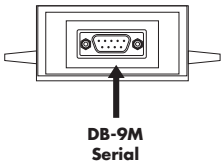
+ Specifications cont. ::

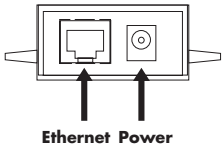
- Serial configuration interface
  - Command line, XML Remote Command Interface (RCI)
- User-defined network service/port configuration
  - HTTP/HTTPS, Telnet, Rlogin, Advanced Digi Discovery Protocol (ADDP), SNMP, RealPort, SSL/TLS, TCP/UDP
- User-configurable TCP/UDP Socket ID
- Data pattern event notification via email/SNMP traps
- Intelligent SNMP device management
- Strong SSL/TLS based encryption
- Patented RealPort COM/TTY port redirection for Microsoft® Windows®, UNIX and Linux

Hardware

- 32-bit NET+ARM high-performance RISC processor (NS7520 55 MHz)
- 4 MB Flash, 16 MB RAM
- Auto-sensing 10/100 Mbit Ethernet interface and network link
- RS-232 or switch-selectable RS-232/422/485 serial interface (DB-9M connector)
  - Throughput up to 230,400 bps
  - 7/8 data bits
  - 1/1.5/2 stop bits
  - None/even/odd parity
  - Full signal support with software/hardware flow control
- Flexible 9-30VDC power supply







Part Numbers ::

	North America	International
Development Kit Models		
Digi Connect SP Development Kit (GNU) – Includes unit w/JTAG interface, hardware debugger, NET+OS platform CD, documentation, cables and power supplies.	DC-SP-01-GN	DC-SP-01-GN
Units for Custom Applications		
Digi Connect SP (single-unit pack w/power supply)	DC-SP-01-C	DC-SP-01-C-W
Digi Connect SP (25-unit pack w/power supply)	DC-SP-01-C-25	DC-SP-01-C-W-25
Digi Connect SP, RS-232 Only (single unit w/power supply)	DC-SP-01R-C	DC-SP-01R-C-W
Digi Connect SP, RS-232 Only - Bulk (25-unit pack w/power supplies)	DC-SP-01R-C-25	DC-SP-01R-C-W-25
Units with Standard Firmware		
Digi Connect SP, RS-232/422/485 (single unit w/power supply)	DC-SP-01-S	DC-SP-01-S-W
Digi Connect SP, RS-232 - Bulk (25-unit pack w/power supplies)	DC-SP-01R-S-25	DC-SP-01R-S-W-25

Digi Connect® Wi-SP :: Wireless Serial Servers

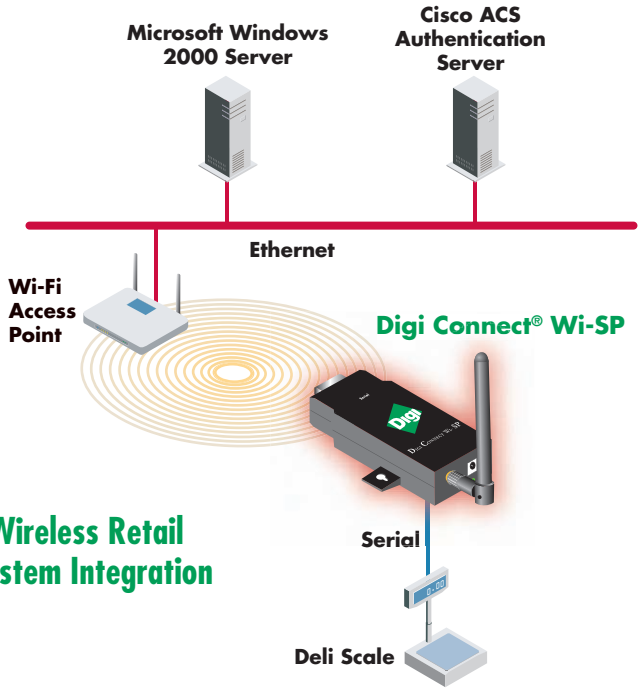
Overview :: Digi Connect Wi-SP is the industry's first wireless serial server to provide enterprise-class wireless security through a complete set of strong encryption and authentication services, which are compliant with the WPA2 and 802.11i standards. It also offers comprehensive product customization options and intelligent remote management and monitoring through Digi Connectware® Manager device management software.

+ Features ::

- Robust on-board TCP/IP stack with built-in web server
- Universal IP address assignment
  - Static IP, DHCP, Auto-IP
- Dynamic DNS support (DHCP Option 12)
- Secure web user interface (HTTP/HTTPS) with context-sensitive online help
- Pre-defined and custom device profiles
- Customizable web interface with optional Java applet support
  - File system w/512 kb user space
- Telnet command line interface
- Modem emulation and port logging
- Serial configuration interface
  - Command line, XML Remote Command Interface (RCI)
- User-defined network service/port configuration
  - HTTP/HTTPS, Telnet, Rlogin, Advanced Digi Discovery Protocol (ADDP), SNMP, RealPort, SSL/TLS, TCP/UDP
- TCP/UDP forwarding characteristics
  - Bytes, idle time, data pattern
- User-configurable TCP/UDP Socket ID
- Data pattern event notification via email/SNMP traps
- Intelligent SNMP device management
- Strong SSL/TLS based encryption
  - DES (56-bit), 3DES (168-bit), AES (128/256-bit)
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- 5-year warranty

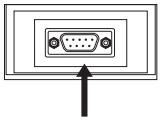
+ Specifications ::

- 32-bit NET+ARM high-performance RISC processor (NS7520 55 MHz)
- 4 MB Flash and 16 MB RAM
- Switch-selectable RS-232/422/485 interface (DB-9M)
  - Throughput up to 230,400 bps
  - Full signal support with software/hardware flow control
- 802.11b wireless LAN interface
- Infrastructure (BSS) and Ad-Hoc Mode (IBSS)
- Flexible 9-30VDC power supply

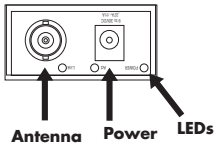


Wireless Retail System Integration

Digi Connect Wi-SP - Front



Digi Connect Wi-SP - Back

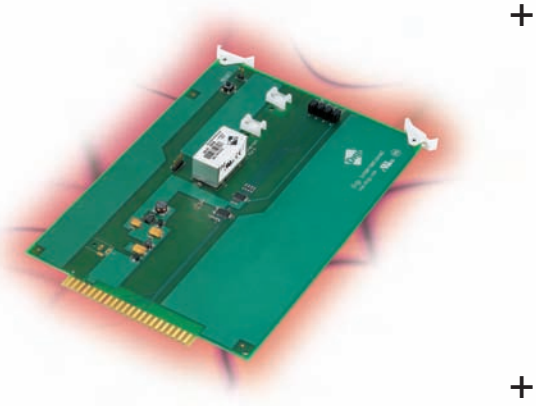


Part Numbers ::

Model	North America	International
Digi Connect Wi-SP (single-unit pack w/power supply and dipole antenna)	DC-WSP-01-S	DC-WSP-01-S-W
Digi Connect Wi-SP (25-unit pack w/power supplies and dipole antennas)	DC-WSP-01-S-25	DC-WSP-01-S-W-25

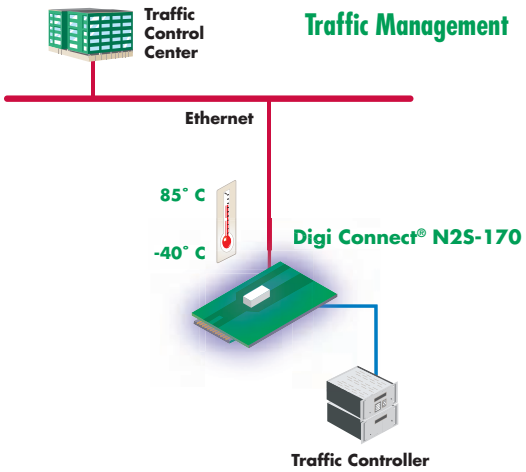
Digi Connect® N2S-170 :: Ethernet Network Controller

Overview :: Built on leading Digi embedded device server technology, the Digi Connect N2S-170 card is an intelligent and highly integrated Ethernet network controller solution for Model 170 traffic signal controller equipment. It delivers reliable network connectivity for Model 170 equipment in a Model 400 modem card-compatible from factor.



+ Features ::

- Designed for Model 170 traffic signal controller equipment
- Form factor compatible with Model 400 modem cards
- Seamless network-to-serial conversion
- 10/100 Mbit Ethernet network interface
- Easy configuration through web interface
- Serial interface supports data rates from 300 bps up to 230 kbps
- Digi's patented RealPort® COM port redirector for Microsoft Windows, UNIX and Linux environments
- Strong NIST-certified data encryption
- Industrial operating temperature range -40° C to 85° C (-40° F to 185° F)
- Lead-free and RoHS compliant design
- UL/UR safety mark
- 5-year warranty



+ Specifications ::

Hardware

- Form factor compatible with Model 400 modem cards
- 32-bit NS7520 NET+ARM processor
- 4 MB Flash / 8 MB SDRAM
- 10/100 Mbit Ethernet interface
- High-speed serial interface
- Robust on-board TCP/IP stack
- Universal IP address assignment
  - Static IP, DHCP, Auto-IP
- Secure web user interface (HTTP/HTTPS) with context sensitive online help
- Telnet command line interface
- Pre-defined and custom device profiles
- Modem emulation and port logging
- Network service/port control (port block)
  - HTTP
  - Telnet
  - RealPort
  - SSL/TLS
  - TCP/UDP
  - Other
- TCP/UDP forwarding characteristics
  - Bytes, idle time, data pattern
- User-configurable TCP/UDP
- Socket ID
- Data pattern event notification via email/SNMP traps
- Intelligent SNMP device management capabilities
- Strong SSL/TLS base encryption
  - DES (56-bit)
  - 3DES (168-bit)
  - AES (128/256-bit)

Network Interface

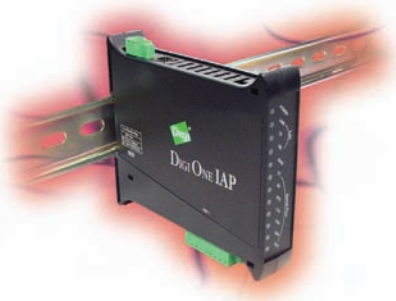
- Standard: IEEE 802.3
- Physical layer: 10 Base-T
- Data rate: 10/100 Mbps (auto-sensing)
- Mode: Full or half duplex (auto-sensing)

Part Numbers ::

Worldwide

Model	
Digi Connect N2S-170 Card (single-pack)	DC-N2S-170-S
Digi Connect N2S-170 Card (10-unit bulk pack)	DC-N2S-170-S-10

Digi One® IAP :: Industrial Serial Servers



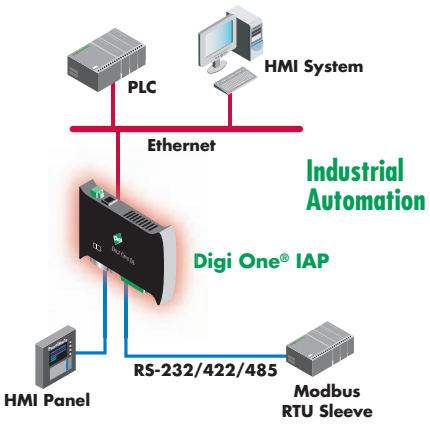
Overview :: Digi One IAP is a serial server and industrial protocol bridge rolled into one. It delivers all the features and functionality of the Digi One IA plus industrial protocol bridging and multi-master support. Digi One IAP can bridge any two industrial serial devices provided they speak one of the supported serial (Modbus, DF1, ASCII) or Ethernet (Modbus/TCP, AB/Ethernet, EtherNet/IP) protocols. Multi-master capability allows multiple masters to simultaneously communicate with a single slave.

Features ::

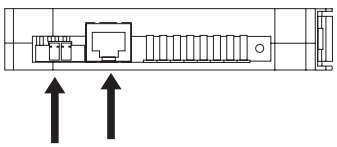
- TCP/UDP and Digi's patented RealPort COM/TTY redirector for remote COM port access – any serial protocol can be moved from device over the network to a PC
- Multi-master/multi-protocol concurrent support for Allen-Bradley and Modbus protocols
- Serial and Ethernet protocol bridging support for Allen-Bradley and Modbus protocols promotes interoperability
- ASCII to protocol translation for Allen-Bradley and Modbus
- Integrated DIN rail mounting
- RS-232/422/485 switch selectable including DB-9 and screw terminal connectors for added flexibility
- Galvanically isolated (from earth ground)
- Class 1, Division 2 rated
- Tunable for low latency or optimized throughput
- NIST FIPS-197 certified (secure AES)
- 5-year warranty

Specifications ::

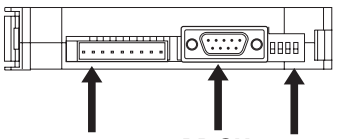
- 10/100Base-T Ethernet support
- Switch selectable RS-232/422/485 RJ-45 serial (Port 1)
- DB-9M and screw terminal block serial port
  - Can be enabled as second direct RS-232 port connection to device on screw terminal
- Baud rates up to 230 Kbps
- Protocol bridge support
  - Ethernet protocols: Modbus/TCP, EtherNet/IP, Allen-Bradley Ethernet
  - Serial protocols: ASCII, DF1, Modbus RTU/ASCII
- Multi-master support for above plus Omron serial and user-defined protocols
- SSL/TLS for encryption and authentication
- TCP/UDP Socket Services
- Support for 64 concurrent socket connections
- Web-based browser configuration
- Patented RealPort technology
- RFC 2217 support
- SNMP (read/write)
- PPP
- DHCP/RARP, ARP-Ping, Static IP for IP address assignment
- Digi Port Authority – Remote management diagnostics and auto-discovery tool
- 35 mm DIN rail mounting
- 9-30VDC input
- 12 diagnostic LEDs
- Tunable latency



Digi One IAP - Top



Digi One IAP - Bottom



Part Numbers ::

Model	North America	International
Digi One IAP - 1 port	70001777	70001777

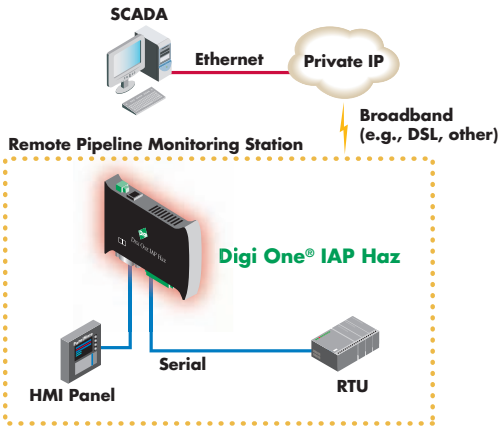
All cables and accessories: pg. 158-159.

Digi One® IAP Haz :: Industrial Serial Servers (Hazardous)

Overview :: The Digi One IAP Haz provides a means of connectivity and interoperability for serial and Industrial Ethernet devices such as Programmable Logic Controllers (PLCs), motors, drives, bar-code readers displays and other types of devices deployed in harsh environments where exposure to extreme temperatures and volatile liquids and gases is common. Applications for the Digi One IAP Haz will be found in many manufacturing environments, power or natural resource distribution and water/ wastewater management.

+ Features ::

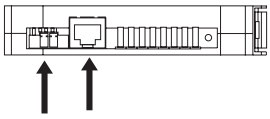
- Hardened design with extended operating temperature -35° C to 74° C (-31° F to 165° F)
- Conformal coated circuit board
- Class 1, Division 2 rated
- TCP/UDP and Digi's patented RealPort COM/TTY redirector for remote COM port access – any serial protocol can be moved from device over the network to a PC
- Multi-master/multi-protocol concurrent support for Allen-Bradley and Modbus protocols
- Serial and Ethernet protocol bridging support for Allen-Bradley and Modbus protocols promotes interoperability
- ASCII to protocol translation for Allen-Bradley and Modbus
- Integrated DIN rail mounting
- RS-232/422/485 switch selectable including DB-9 and screw terminal connectors for added flexibility
- Second serial port can be used as a pass-through port
- Galvanically isolated (from earth ground)
- Tunable for low latency or optimized throughput
- NIST FIPS-197 certified (secure AES)
- 5-year warranty



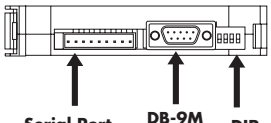
+ Specifications ::

- 10/100Base-T Ethernet support
- Switch selectable RS-232/422/485 RJ-45 serial (Port 1)
- DB-9M and screw terminal block serial port
  - Can be enabled as second direct RS-232 port connection to device on screw terminal
- Baud rates up to 230 Kbps
- Protocol bridge support
  - Ethernet protocols: Modbus/TCP, Ethernet/IP, Allen-Bradley Ethernet
  - Serial protocols: ASCII, DF1, Modbus RTU/ASCII
- Multi-master support for above plus Omron serial and user-defined protocols
- SSL/TLS for encryption and authentication
- TCP/UDP Socket Services
- Support for 64 concurrent socket connections
- Web-based browser configuration
- Patented RealPort technology
- RFC 2217 support
- SNMP (read/write)
- PPP
- DHCP/RARP, ARP-Ping, Static IP for IP address assignment
- Digi Port Authority – Remote management diagnostics and auto-discovery tool
- 35 mm DIN rail mounting
- 9-30VDC input
- 12 diagnostic LEDs
- Tunable latency

Digi One IAP Haz - Top



Digi One IAP Haz - Bottom



Part Numbers ::

Model	North America	International
Digi One IAP Haz	70002326	70002326
12VDC, 100-240VAC Extended Temperature Power Supply (no plug)	76000736	76000736

All cables and accessories: pg. 158-159.

Digi One® IA :: Industrial Serial Servers

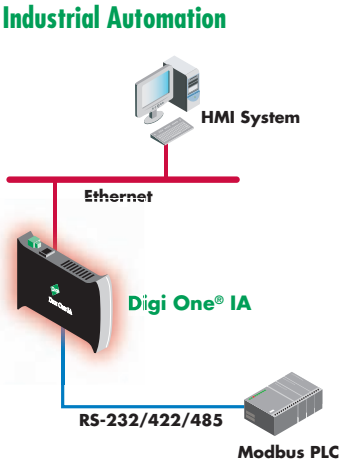
Overview :: Digi One IA adds serial-to-Ethernet and Modbus-to-Modbus/TCP network connectivity to virtually any industrial device with a serial port in minutes. Designed to meet the specific requirements of the industrial automation market, it offers an easy way to network-enable previously isolated RS-232/422/485 serial devices such as Programmable Logic Controllers (PLCs), Remote Terminal Units (RTUs), process and quality equipment, motors, drives, bar-code readers and operator displays.

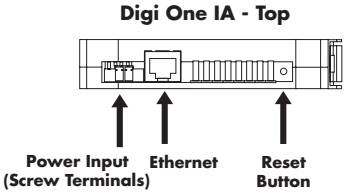
+ Features ::

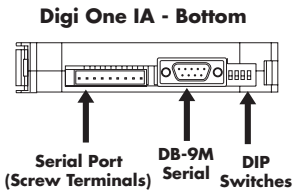
- Easily Ethernet-enable any industrial serial device
- Modbus serial to Modbus/TCP protocol conversion
- Supports serial master and serial slave modes
- Supports up to 10 Modbus masters
- Industrial DIN rail mounting for use in space-prohibitive control cabinets
- RS-232/422/485 switch selectable including DB-9 and screw terminal connectors for added flexibility
- Digi's patented RealPort® redirector for COM or TTY port control and management
- TCP/UDP Socket Services for broad device connectivity and application use
- Galvanically isolated (from earth ground)
- Class 1, Division 2 rated
- Tunable for low latency or optimized throughput
- Easy configuration though web browser interface (HTTP)
- 5-year warranty

+ Specifications ::

- 10/100Base-T Ethernet support
- 1 serial port (DB-9 and screw terminal connectors)
- Switch selectable RS-232/422/485
- 9-30VDC input with screw terminal block power jack
- Patented RealPort technology
- TCP/UDP Socket Services
- UDP
- Telnet, Reverse Telnet and extended Telnet
- HTTP browser configurable
- DHCP/RARP, APR-Ping for IP addressing assignment
- Flash upgradeable firmware
- Baud rates up to 230 Kbps
- Full modem and hardware flow control
- 35 mm DIN rail mounting
- LED status for serial signals, power, Ethernet and diagnostics
- RFC 2217 support







Part Numbers ::

Model	North America	International
Digi One IA – 1 port	70001862	70001862

Digi One® SP IA :: Industrial Serial Servers

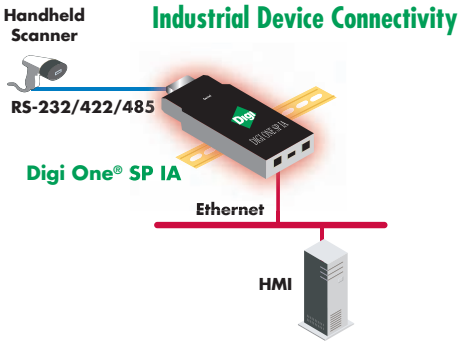
Overview :: Digi One SP IA allows any industrial device with a serial port to be easily connected to Ethernet. The compact serial server is designed for entry level RS-232/422/485 serial-to-Ethernet connectivity for industrial automation applications and includes all DIN rail mounting hardware.

+ Features ::

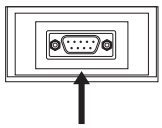
- DIN rail and wall mount kits for flexible mounting options
- 9-30VDC power with bare-wire "pigtail" for direct connection included
- Easy configuration using installation CD
- Compact form factor – only 3.70 in (9.04 cm) in length
- Digi's Patented RealPort® redirector for COM or TTY port control and management
- TCP/UDP Socket Services for broad device connectivity and application use
- Auto-connect the serial device to a networked server using raw, Telnet, Rlogin
- Reverse Telnet for easy access of serial devices from network
- Easy configuration through web interface (HTTP)
- Switch selectable RS-232/422/485 serial interface supports any type of serial device
- Modem emulation allows support for devices designed only for modem communications
- 5-year warranty

+ Specifications ::

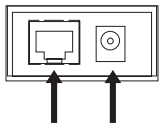
- 10/100Base-T Ethernet support
- 1 serial port (DB-9M)
- Switch selectable RS-232/422/485
- Baud rates up to 230 Kbps
- DIN rail and wall mount kit included
- Full modem and hardware flow control
- Modem emulation
- TCP/UDP Socket Services
- Telnet and Reverse Telnet
- DHCP/RARP/ARP-Ping for IP address assignment
- HTTP configuration
- Patented RealPort technology
- LED status for link and power



Digi One SP IA - Front



Digi One SP IA - Back



Part Numbers ::

Model	North America	International
Digi One SP IA – 1 port	70001999	70002000

All cables and accessories: pg. 158-159.

PortServer® TS 8/16 Family :: Standard Serial Servers

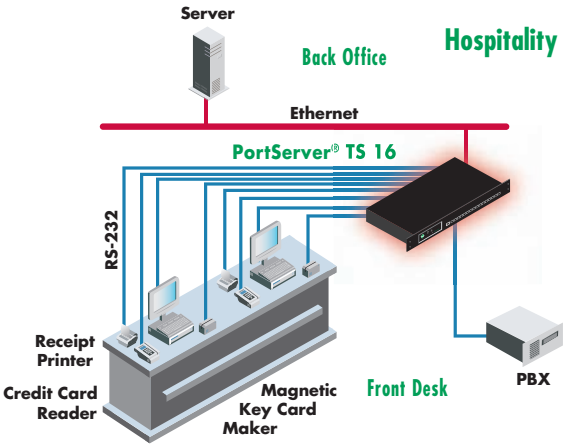
Overview :: The PortServer TS 8/16 family delivers simple, reliable and cost-effective RS-232/422/485 serial-to-Ethernet connectivity with a robust feature set for efficient device management. It is ideal for a wide range of applications including property management, retail/POS, inventory and logistics management, and industrial automation. The PortServer TS 8/16 family also offers additional value for secure console access applications that do not require the high-end features of the Digi Passport or Digi CM.

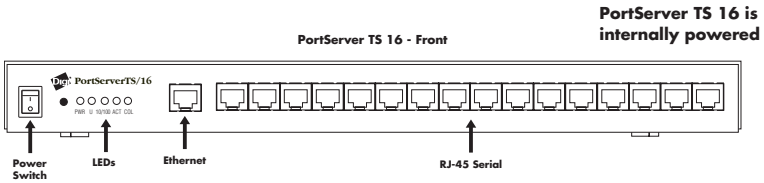
+ Features ::

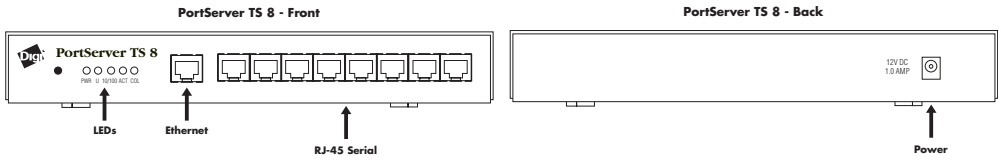
- Cost-effective serial-to-network connectivity
- SSHv2 ensures encrypted connections
- Digi's patented RealPort® with encryption and authentication for COM or TTY port control and management
- Ports may be shared between multiple hosts running different operating systems
- Supports SNMP for easy network management
- Supports RADIUS authentication and accounting
- Tunable for low latency or optimized throughput
- 5-year warranty

+ Specifications ::

- 10/100Base-T Ethernet support
- 8 or 16 serial ports (RJ-45)
- RS-232 and switch selectable RS-232/422/485 models
- Baud rates up to 230 Kbps
- TCP/UDP/Telnet Socket Services
- Patented RealPort with encryption and authentication
- RFC 2217 support
- 48VDC power option (RS-232 models only)
- Modem emulation
- SNMP (read/write)
- PPP
- SSHv2, SSL/TLS
- Port buffering
- Modbus to Modbus/TCP conversion
- HTTP
- Digi Port Authority – Remote management diagnostics and auto-discovery tool
- DHCP/RARP/ARP-Ping for IP address assignment







Sun microsystems Solaris™ Ready

Part Numbers ::

Model	North America	International
PortServer TS 8 - RS-232	70001734	70001741
PortServer TS 8 MEI - RS-232/422/485, 19" rack mountable	70001979	70001981
PortServer TS 8, 48VDC - RS-232, DC power	70001885	70001885
PortServer TS 16 - RS-232	70001733	70001738
PortServer TS 16 MEI - RS-232/422/485, 19" rack mountable	70001978	70001980
PortServer TS 16 Rack - RS-232, 19" rack mountable	70001742	70001743
PortServer TS 16 Rack, 48VDC - RS-232, DC power, 19"/23" rack mountable	70001747	70001747
PortServer TS 16 Enterprise Rack - RS-232, 19" rack mountable	70001928	70001929

Cables and accessories: pg. 158-159.
See www.digi.com for additional cable converters.

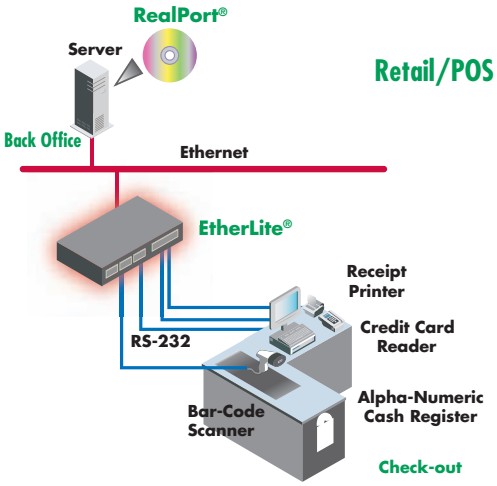
Overview :: The EtherLite family blends the control and performance of asynchronous serial communications with the convenience of an Ethernet connection. Available in two- to 32-port versions, the traffic from all serial ports is serviced by a single TCP/IP session. EtherLite requires a connection to a computer with a Digi-supported operating system and offers network efficiency at a low price per port. It is ideal for retail/POS, process control and data collection.

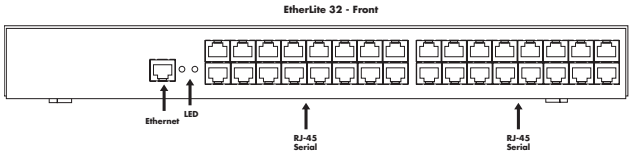
+ Features ::

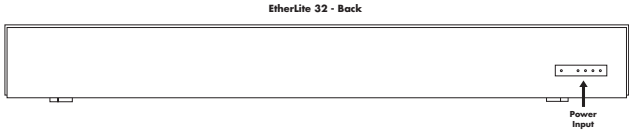
- Choose from RS-422, RS-485 and RS-232/422 switch selectable models for added flexibility
- Multiplexes all serial ports into a single TCP/IP session, minimizing Ethernet traffic
- Digi's patented RealPort® with encryption and authentication drivers for UNIX, Linux and Windows
- Delivers real serial ports, without Telnet, Rlogin, Reverse Telnet or other complex networking overhead
- 5-year warranty

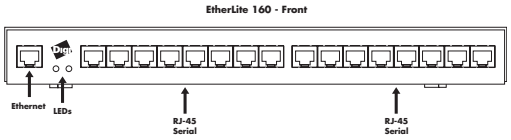
+ Specifications ::

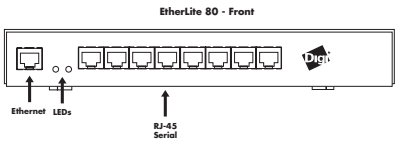
- 2, 8, 16 or 32 asynchronous serial ports
- 2-port RS-422 or RS-485 serial
- 16-port switch selectable RS-232/422 serial
- Up to 115 Kbps on all ports simultaneously
- Auto-detection of either 10 Mbps or 100 Mbps Ethernet (EtherLite 80, 160 and 162 models)
- BOOTP or Static IP support
- Full RAS support for Windows 2000, Windows XP, Windows Server 2003
- 1U rack-mountable 32-port model

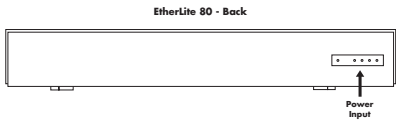


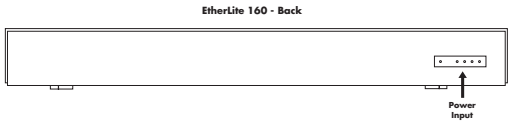












Part Numbers ::

Model	North America	International
EtherLite 2 - 2 ports, RS-232, RJ-45	70001430	70001531
EtherLite 2 - 2 ports, RS-422, RJ-45	70001432	70001532
EtherLite 2 - 2 ports, RS-485, RJ-45	70001683	70001706
EtherLite 160 - 16 ports, RS-232, RJ-45	70001427	70001528
EtherLite 160 - 16 ports, RS-232, 48VDC, RJ-45	70001877	70001877
EtherLite 162 - 16 ports, RS-232/422, RJ-45	70001428	70001529
EtherLite 32 – 32 ports, RS-232, RJ-45	70001429	70001533
EtherLite 80 – 8 ports, RS-232, RJ-45	70001767	70001768

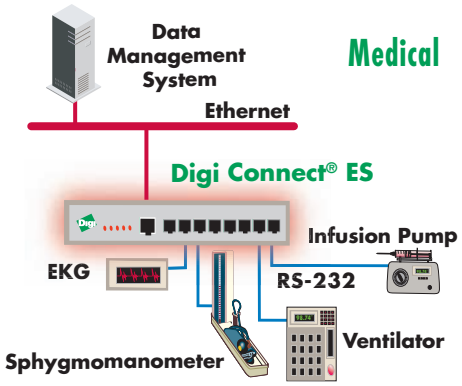
All cables and accessories: pg. 164.

Digi Connect® ES :: Serial Server (Extended Electrical Safety)

Overview :: Digi Connect ES is the first IEC 60601/EN60601 compliant device of its kind. It has four, eight or 16 galvanic isolated RS-232 serial ports, with a 10/100 Mbps network interface and optional Ethernet switch (eight-, 16-port models). It may be used to provide Ethernet connections from serial devices such as ventilators, EKGs, patient monitoring systems, infusion pumps and glucose meters to a central data management system.

+ Features ::

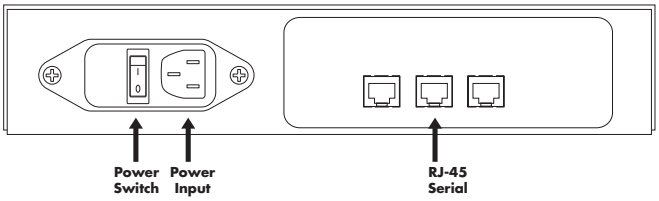
- 4-, 8- or 16-port RS-232 serial-to-network connectivity
- IEC 60601 compliant
- Galvanic isolation on all ports
  - Ensures there is no electrical path from port to port
  - Prevents a ground fault from affecting the operation of the Digi Connect ES or any device connected to it
- Wall mountable
- Digi's patented RealPort® technology provides local serial port functionality; encryption and authentication available for SSL-based protection for additional security
- Supports SNMP for easy network management



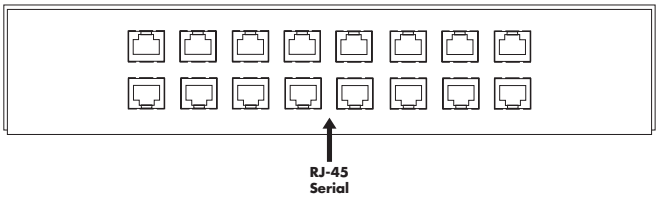
+ Specifications ::

- 4, 8 or 16 isolated RS-232 serial ports (2.5 kV)
- RJ-45 serial connectors
- Isolated Ethernet ports (1.5 kV)
- Connects to 10/100 Mbps Ethernet LAN
- Optional 3-port Ethernet switch on 8- and 16-port models
- DHCP, RARP and ARP-Ping for easy IP address assignment
- HTTP for easy browser configuration
- Telnet, Reverse Telnet, Rlogin and auto-connect
- Up to 9 Telnet or Rlogin sessions per port
- TCP and UDP Socket support
- Password access
- Line Printer Daemon (LPD)
- SNMP
- HTTPS, SSL/TLS
- Digi Port Authority-Remote for easy monitoring
- Easy firmware upgrades via TFTP
- Surge protection on all ports
- 230 Kbps throughput on all ports
- Full modem and hardware flow control
- LEDs for serial and Ethernet activity
- White metal enclosure
- SSHv2 feature available on all ports simultaneously

Digi Connect ES - Front



Digi Connect ES – Back

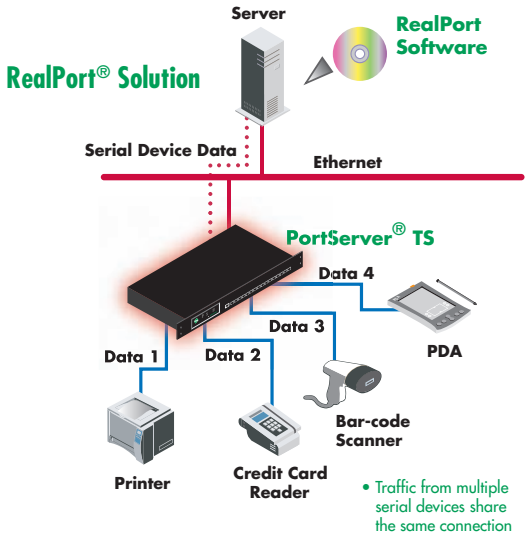


Part Numbers ::

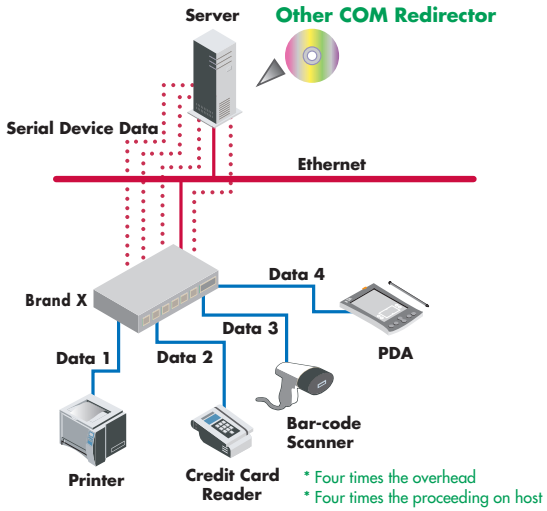
Model	North America	International
Digi Connect ES 4 - 4 ports	DC-ES-4	DC-ES-4-EU
Digi Connect ES 8 - 8 ports	DC-ES-8	DC-ES-8-EU
Digi Connect ES 8 with Ethernet Switch - 8 ports	DC-ES-8-SW	DC-ES-8-SW-EU
Digi Connect ES 16 - 16 ports	DC-ES-16	DC-ES-16-EU
Digi Connect ES 16 with Ethernet Switch - 16 ports	DC-ES-16-SW	DC-ES-16-SW-EU
Digi Connect ES VESA Mounting Bracket	DC-ES-BKT	DC-ES-BKT

All cables and accessories: pg. 159.

RealPort® :: Management Tools/Special Features



Other COM Redirector



Overview :: Digi's patented RealPort software allows companies to easily network-enable serial devices without spending valuable time and money to re-write existing application programs. Many of today's key business applications were written to talk to serial devices that are directly connected to servers; however, these devices are often located far away from servers or PCs.

RealPort software leverages the TCP/IP network infrastructure to provide a virtual connection to serial devices. The software is installed directly on the server and allows applications to talk to devices across a network as though the devices were directly attached to the server. In actuality, the devices are connected to a Digi external serial server somewhere on the network.

RealPort software is unique among COM port redirectors. It is the only implementation that allows multiple connections to multiple ports over a single TCP/IP connection. This means RealPort supports the maximum number of remote devices – the number is restricted only by the operating system and server processing power. Other implementations on the market require a separate TCP/IP connection for each serial port, resulting in higher network overhead and more processing demands on the server.

RealPort is a standard feature of all Digi external serial servers. OS support includes Microsoft Windows Server 2003, Vista, XP, 2000, NT, 98, Me; SCO Open Server and UnixWare; Linux; AIX; True 64; Sun Solaris SPARC and Intel; HP-UX; and NCR UNIX MP-RAS.

RealPort® with Encryption :: Management Tools/Special Features

Overview :: Digi takes RealPort technology a step further with patent-pending RealPort with Encryption, offering a secure Ethernet connection between the COM or TTY port and a serial server. Encryption prevents internal and external snooping of data across the network by encapsulating the TCP/IP packets in a Secure Sockets Layer (SSL) connection and encrypting the data using Advanced Encryption Standard (AES), one of the latest, most efficient security algorithms.

RealPort with Encryption is available on all PortServer TS and Digi Connect models as well as Digi One IAP. Other models run standard RealPort.